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Third culture? From the arts to the sciences and back again

ABSTRACT

I substantiate the argument that lead me to believe very strongly that we need to find new ways for the arts and sciences to collaborate, and to create a networked culture that brings the arts and humanities into interaction with the sciences and engineering. Our world faces many problems, on all scales, and we must use all the different approaches to create a world culture that is sustainable and respects and nurtures the differing world-views of each community. We have no choice but to forge new art–science collaborations.

KEYWORDS

art
science
inter-disciplinary
translation
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digital culture

INTRODUCTION

I believe very strongly that we need to find new ways for the arts and sciences to collaborate, and to create a networked culture that brings the arts and humanities into interaction with the sciences and engineering. Our world faces many problems, on all scales, and we must use all the different approaches to create a world culture that is sustainable and respects and nurtures the differing world-views of each community. We have no choice but to forge new art–science collaborations.

However, I do not believe that the concept of a third culture is a useful one in exploring the ways that links between the arts and sciences can be

generative of new ideas and cultural developments. There are very good reasons – epistemological and methodological – that knowledge construction has evolved over the last few hundred years with the creation of various evolving disciplines. At the same time, we now live in a situation of 'networked knowledge', and our institutional and social organization often make it difficult to create the conditions of interesting interaction between the arts and sciences. In addition, innovation and creativity theory tells us that we need to deploy the whole panoply of different approaches in interdisciplinary, multi-disciplinary and trans-disciplinary practice.

Michael Punt in a recent editorial in *Leonardo Reviews Quarterly* (*LRQ*) (Issue 1, 3 May 2011: http://www.leonardo.info/reviews/LRQ/LRQ%201.03.pdf) asks some simple questions: As we move into a new cultural context, of networked e-culture, what is gained, what is lost? When two cultures interface there can be constructive or destructive interference. What knowledge is being transferred, or constructed, by whom and to whom? His scepticism I think rightfully argues that we are very much in the 'Dark Ages' and not yet the 'Middle Ages' of the way that digital cultural is reshaping knowledge. Martin Zierold in his commentary in the same issue of *LRQ* points to the writing of Vilem Flusser, who emphasized that these new cultural tropes have to be learned, and this takes time. The idea of a third culture I think reflects an understandable but counter-productive impatience and a desire for easy formulas that is not warranted and will not prove to be generative.

One way to think of this is as a problem of 'translation', by deploying a geometrical analogy. In Euclidian geometry the three 'orthogonal' transformations are translation, rotation and reflection. Euclidian, 'rigid' transformations preserve the properties of the objects; they are 'isometric'. The nineteenth and early – twentieth centuries saw the development in mathematics of 'non-Euclidian' geometries with profound consequences in physics. We now know that the universe is 'non-Euclidian'. Special and general relativity informs us that space and time are inseparable and that we need to think of 'manifolds', which may be Euclidian on small scales but much more complex on larger ones, with folds and singularities. Needless to say, 'culture' is non-Euclidian, and as we move ideas, or objects or processes, around 'the space of culture', the move to networked culture is not isometric.

Translation studies has recently emerged as a new focus for understanding a number of problems in the humanities, with the expansion of the métier of textual translation to cross-cultural studies, and more recently interdisciplinary studies. Within the digital humanities there is also interest in the translation model when trying to understand, or design, how we 'translate' cultural creations into differing media, how the same project can be expressed in social media, in sound, technological performance or other types of digital mediation. I want to explore here the usefulness of some of the concepts of translation studies to current discussions on the relations between the arts and sciences. Rainer Schulte points out that 'the German word for "to translate" is "übersetzen"' (2010). In its most basic visualization, the German word means 'to carry something from one side of the river to the other side of the river'. The metaphor carries a number of complexities, which can illustrate why translation in a non-Euclidian space is not isometric: the landscape on each bank of the river is different, and thus objects are transformed, or grow or shrink, in their new context. Some things can be carried over by boat, others are un-transportable; the journey back is not symmetric with the journey there; the boatman has an influence on what is carried and how; the idea

is not to pave over the river to unite the banks, but rather to encourage trade and barter between the banks; travel between the banks is in itself enriching; the nature of the river is important (How long does it take to cross? Is it a violent crossing? Does one get distracted on the crossing? and so on). And of course acts of productive translation require the translator to find firm footing in the context of the other side of the river.

To avoid the trap of the false dichotomy that C. P. Snow led many into, I would prefer to imagine a river delta (2009).[1] The river beds themselves move with time, and silt can create new banks and territories. In a recent book – actually a pamphlet of unusual vigour titled 'Science is not Art' – Jean-Marc Levy-Leblond has mounted an all-out attack on some of the claims of the art-science field today (Levy-Leblond 2010). Levy-Leblond demolishes some of the art–science communities' favourite toys (the golden ratio, fractals, beauty, techno-kitsch, neuroaesthetics, new media art in general and 3D realism). He decries the search for a new 'syncretism' that would somehow help us create a 'third culture' that melds the arts and sciences. In his view, the arts and sciences are two different banks of a river as distinct and unreconcilable as two ecologies that develop within different contexts, on unmergeable continents, and have grown with differing survival mechanisms and goals. He argues that there are very good reasons that the arts and sciences have separated, that we need disciplines and we do not want a syncretism. In the same issue of *LRQ*, co-editor Jacques Mandelbrojt[2] reviews Levy-Leblond's book, and points out that the concluding chapter, entitled 'Brief encounters', is actually a plea for art–science interaction of a specific nature. Levy-Leblond's arguments fall into two categories: first, what I would group under the general category of creativity theory, and second the feeding of the cultural imagination that helps us make sense – make meaning – of the world around us. I want to argue here that these 'goals' of art–science may be viewed as tasks of 'translation studies'. Scientists get their ideas from somewhere, and Levy-Leblond values the 'otherness' of the perspective of artists, which forces scientists to re-frame as a potential source of 'creative friction'. This idea is one that is frequently discussed in translation studies: the translator's role in unravelling the nature of 'other-ness'. Artists who visit or work in the world of science, through the journey from art to science and back, cannot only notice aspects of the landscape ignored by the scientist, but also translate in ways familiar to the indigenous people on the other bank, ideas or experiences that have no equivalent. Thus, scientists are embedded in a world that is only accessible through scientific instruments, whereas in daily life we are in a world accessible only by, and filtered by, our senses (augmented by our cell phones). These are different worlds; one of the tasks of the translator then is to find ways to transfer certain 'translatables' while acknowledging that much is untranslatable.[3] Levy-Leblond's second general argument relates to how artists help scientific ideas become culturally re-appropriated, and then fed back into the imagination of scientists. He argues that it is a necessity today 'to re establish the link between the concepts constructed by science and the reality from which they were abstracted'. Again, this idea is one that is rooted in basic concepts of translation studies. Einstein famously stated that 'The universe of ideas is just as independent of the nature of our experience as clothes are of the form of the human body' (1921: 6) The interest, even fascination, of artists in the 'embodiment' of scientific concepts can therefore be seen as a translation device. Numerous projects in 'science as theatre' or interactive artworks exemplify this approach.

1. I am bothered by the river metaphor since it sets up a 'straw man' dichotomy between the arts and sciences. I would prefer to somehow have a network of water streams to carry the idea of 'networked knowledge' rather than transdisciplinary practice as argued by David Goldberg and Kathy Davidsen.

2. Jacques Mandelbrojt (http://www.leonardo.info/reviews/apr2011/levyleblond_mandelbrojt.php). My review of the book can be found at http://malina.diatrope.com/ 2011/04/17/is-art-science-hogwash-a-rebuttal-tojean-marc-levy-leblond/.

3. If I had the space here I would also explore the issue of 'teachability', since the issue of 'translatability' also carries with it the idea that there is tacit and explicit knowledge that may or may not be 'transportable' or teachable.

Other interesting aspects of concepts from translation studies can be quickly sketched. Artists' use of visualization and sonification technologies from computer science are a rich terrain of art–science practice and should be viewed as projects in translation, not projects in representation. As Gyorgy Kepes stated (1956), they appropriate the 'new landscape of art and science', but their goal is not transliteration or accuracy; rather it is to 're-sense', in the context of the arts, ideas that arise on the other banks of the river deltas. Perhaps my non-Euclidian analogy can help us in thinking about 'sense-making'. The born-digital generation has a currency in a dialect that is valid on both sides of the river, and this shared language entails shared ontologies and eventually connected epistemologies. This process of shared language-building, enabling trade and barter and not assimilation, is one that is surely a contributor to creativity and innovation on both banks. But this surely takes time. And like all good translators, we must avoid 'false friends' that unintentionally may create misunderstanding.

In a recent text, Lynn Hogard, Denis Kratz and Rainer Schulte note that 'technology, globalism, and relentless change' (2010) are characteristics that are creating synergies between the humanities and sciences for which translation techniques can be strategic. They go on to state that there are three challenges:

1. To navigate the technological environment, expertise and the ability to employ the current and yet to be invented technologies of enquiry and communication
2. To navigate in a global environment, a capacity for empathic understanding of the other and the ability to collaborate and communicate across barriers of language and culture
3. To respond adequately to change and surprise, intellectual flexibility and creativity – that is, applied imagination.

These would seem to naturally define some of the agendas in art–science practice. To return to our translation idea, one of the strategies of art–science practice could be the development of the tools of translation studies as means 'to carry something from one side of the river to the other side of the river' and back. And of course the metaphor of our delta crossing begs the question of the nature and source of the river and the nature of the sea, and of the rain that feeds both the river and the land. And we know that to be effective we must deploy not only metaphors but also analogies and models. We are just at the beginning of the 'translation' to networked culture, and the task of art–science collaboration is an urgent one in the context of the problems we face today.

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at the ATEC Center at the University of Texas, Dallas (http://www.utdallas.edu/ah/courses/standalonecourse.php?id=3624).

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Narrating the Catastrophe
An Artist's Dialogue with Deleuze and Ricoeur

BY JAC SAORSA

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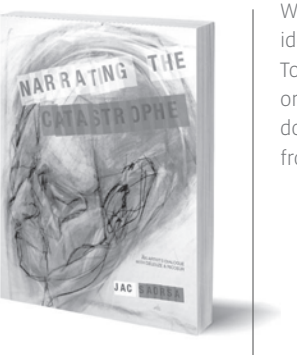

An extraordinary collaboration between contemporary art and critical discourse, *Narrating the Catastrophe* guides readers through unfamiliar textual landscapes where 'being' is defined as an act rather than a form. Drawing on Paul Ricoeur's notion of intersubjective narrative identity as well as the catastrophe theory of Gilles Deleuze, Jac Saorsa establishes an alternative perspective from which to interpret and engage with the world around us. A highly original – and visually appealing – take on a high-profile issue in contemporary critical debate, this book will appeal to all those interested in visual arts and philosophy.

JAC SAORSA is a visual artist and writer who has taught in universities in Costa Rica and Cyprus. She is the author of *Drawing on Conversation: Drawing as a Method of Exploring* and *Interpreting Ordinary Verbal Interaction.*

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